There's Life in Hazard Trees

The goals of hazard tree management programs are to maximize public safety and maintain a healthy sustainable tree resource. Although hazard tree management frequently targets removal of trees or parts of trees that attract wildlife, it can take into account a diversity of tree values. With just a little extra planning, hazard tree management can be highly beneficial to wildlife while maintaining the goals of the program. The objective of this information guide is to provide considerations regarding wildlife when making decisions during hazard tree assessments. The decision-making model provided with this guide can be used as a tool during tree inspections.

What is the link between hazard tree management and wildlife?
There are more than 120 species of birds, 140 kinds of mammals and 270 species of reptiles and amphibians that nest and forage in dead or deteriorating trees. Often in hazard tree management, it is the dead and deteriorating parts of a tree, or the entire tree (such as a snag), that is removed. This can negatively impact wildlife populations and species that are dependent on these trees as essential habitat components. It is likely that these trees may not be replaced for years. As the number of cavity trees decrease, wildlife species that depend on cavities may disappear.

A tree that has:
a potential to fail + a potential to strike a target*
=hazard tree

Why are considerations for wildlife important?
Surveys demonstrate that wildlife is important to people. In a recent study, landowners identified wildlife as a key reason for owning land. Other studies show that, in urban areas, 93% of residents want to know how to attract wildlife and support habitat, and each year 49 million people in the U.S. enjoy feeding and watching birds. In addition, some threatened and endangered species use snags, cavity trees, or dead and down logs as important habitat components. When a tree dies, its usefulness does not end, its role simply changes.

*** A target is:**
anything of value that a tree or part of a tree could strike when failure occurs. (i.e. a person, structure, vehicle etc.)

How to identify trees currently and potentially useful to wildlife.

A few ways to identify trees currently used by wildlife include:

1. observations of wildlife using a tree
2. signs of wildlife use (existing cavities, dens or current woodpecker activity in a tree)
3. presence of fresh scat or bird droppings in, on or around a tree

Trees potentially useful to wildlife include:

1. trees with decay
2. trees with fungal conks (a sign of decay)
3. trees with broken off tops and branches
4. trees with old wounds or scars

If a tree does not have a cavity , it can still be used by wildlife. Dead or partially dead trees without cavities can provide foraging, perching and nesting sites for non-cavity nesting species.

Where and when is it appropriate to consider wildlife in hazard tree management?

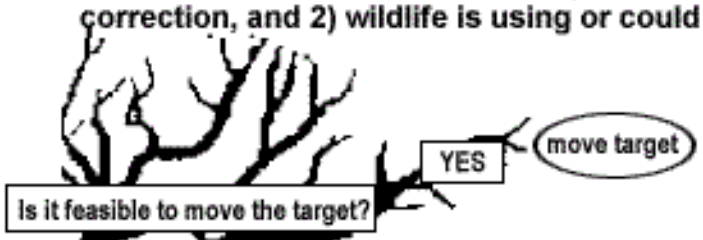
It is appropriate where and when human safety is not compromised.

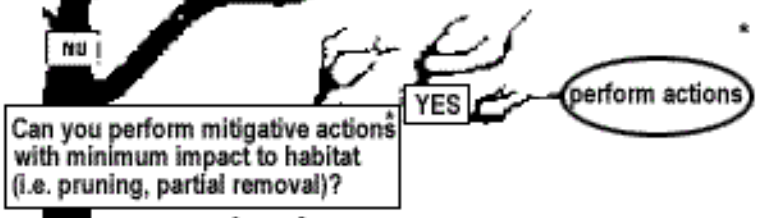
Who benefits by using hazard trees and for what purpose?

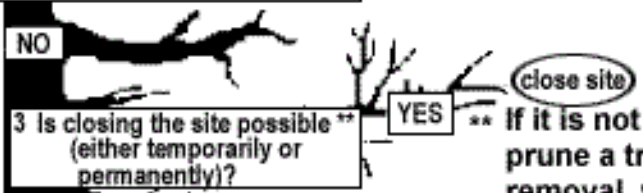
forage sites	**perches**	**nest sites**	**den sites**
woodpeckers	hawks	chickadees, great blue herons, ospreys, wood ducks, mergansers, woodpeckers	raccoon, fisher, pine marten, porcupine, gray and flying squirrels, cottontail rabbits, snowshoe hare, bear, bobcat
singing perches	**roost sites**		
songbirds	bats, tree frogs		

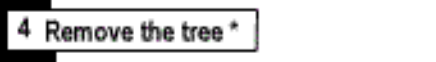
Wildlife Habitat / Hazard Tree Decision Model

This model provides a logical order of decision making that will help minimize impact to wildlife and maintain, enhance, and/or create wildlife habitate while addressing hazard tree concerns. Assumptions that are built into the model are: 1) there is a hazard tree that needs correction, and 2) wildlife is using or could potentially use the tree.









* **Placing a nesting box (Screech Owl, Northern Flicker, squirrel) on a site can be a successful replacement when cavaties are lost through tree or limb removal.**

** **If it is not possible to move a target, prune a tree or conduct a partial removal, wildlife habitat and safety can be maintained by closing off the site. This mitigative action can prevent disturbance to wildlife during the most critical (breeding) time. Remember, risk and values must be balanced with common sense when making decisions about hazard trees.**

5 Can you leave the felled tree on the site to create a possible wildlife habitat?
Felled trees or logs are important to insects, mice, salamanders, bears, grouse, woodpeckers

Questions? Contact: Federal
USDA Forest Service:
Durham, NH (603) 868-7600
St. Paul, MN (651) 649-5162
Mortantown, WV (304) 285-1550

Please consult your state wildlife agency or Threatened and Endangered Species Coordinator for more information on wildlife.

Prepared by: Mary Torsello, Pathologist and Toni McLellan, Wildlife Biologist, USDA Forest Service, Northeastern Area, State & Private Forestry, Durham, NH

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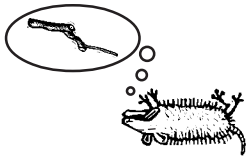

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① Is it feasible to move the target?

YES → move target

NO

② Can you perform mitigative actions* with minimum impact to habitat (i.e. pruning, partial removal)?

YES → perform actions

NO

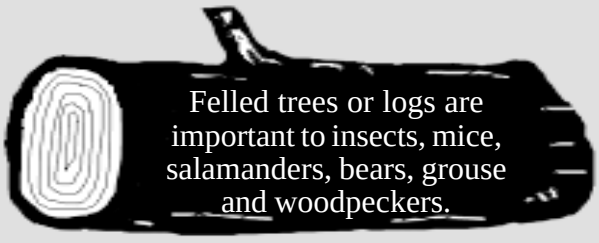
③ Is closing the site possible ** (either temporarily or permanently)?

YES → close site

NO

④ Remove the tree. *

⑤ Can you leave the felled tree on the site to create a possible wildlife habitat?



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